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(12) **United States Design Patent**  
**Shaffner et al.**

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(54) **ANTENNA APPARATUS**

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(73) Assignee: **Space Exploration Technologies Corp.**, Hawthorne, CA (US)

(\*\*) Term: **15 Years**

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(51) **LOC (13) Cl.** ..... **04-03**

(52) **U.S. Cl.**  
USPC ..... **D14/230**

(58) **Field of Classification Search**  
USPC ..... D14/230, 231, 155, 216  
(Continued)

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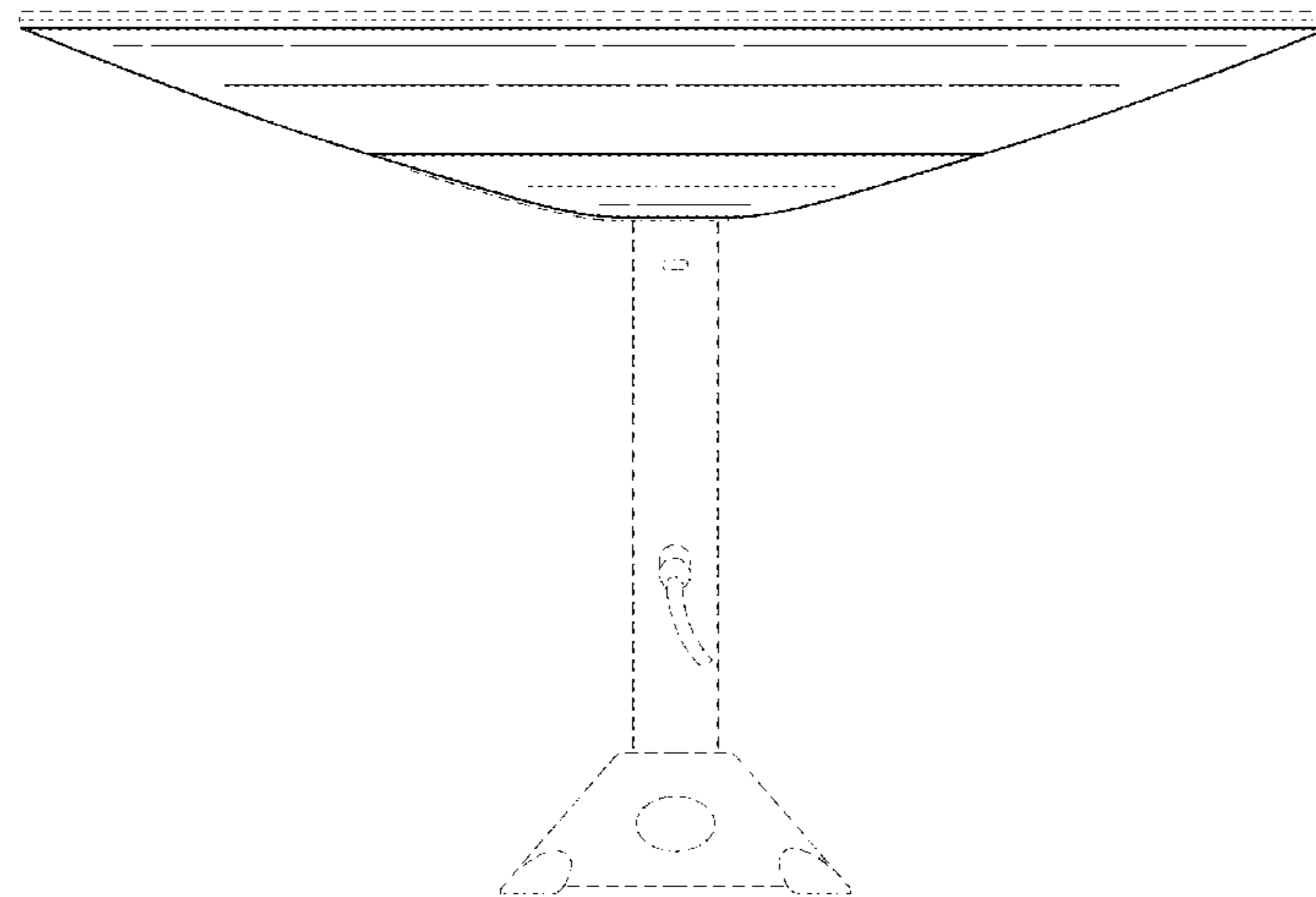
(57) **CLAIM**

The ornamental design for an antenna apparatus, as shown and described.

**DESCRIPTION**

FIG. 1 is a bottom perspective view of an antenna apparatus in a first configuration;  
FIG. 2 is a left side view of the antenna apparatus shown in FIG. 1;  
FIG. 3 is a top perspective view of the antenna apparatus of FIG. 1 shown in a second configuration;  
FIG. 4 is a bottom perspective view of the antenna apparatus shown in FIG. 3;  
FIG. 5 is a left side view of the antenna apparatus shown in FIG. 3;  
FIG. 6 is a right side view of the antenna apparatus shown in FIG. 3;  
FIG. 7 is a top view of the antenna apparatus shown in FIG. 3;  
FIG. 8 is a bottom view of the antenna apparatus shown in FIG. 3;  
FIG. 9 is a front view of the antenna apparatus shown in FIG. 3; and,  
FIG. 10 is a rear view of the antenna apparatus shown in FIG. 3.  
The broken lines shown in the figures represent portions of the antenna apparatus that form no part of the claimed design.

**1 Claim, 10 Drawing Sheets**



(58) **Field of Classification Search**

CPC ..... H01Q 13/18; H01Q 19/132; H01Q 1/20;  
 H01Q 19/134; H01Q 19/19; H01Q 19/20;  
 H01Q 9/28; H01Q 1/44; H01Q 5/45;  
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See application file for complete search history.

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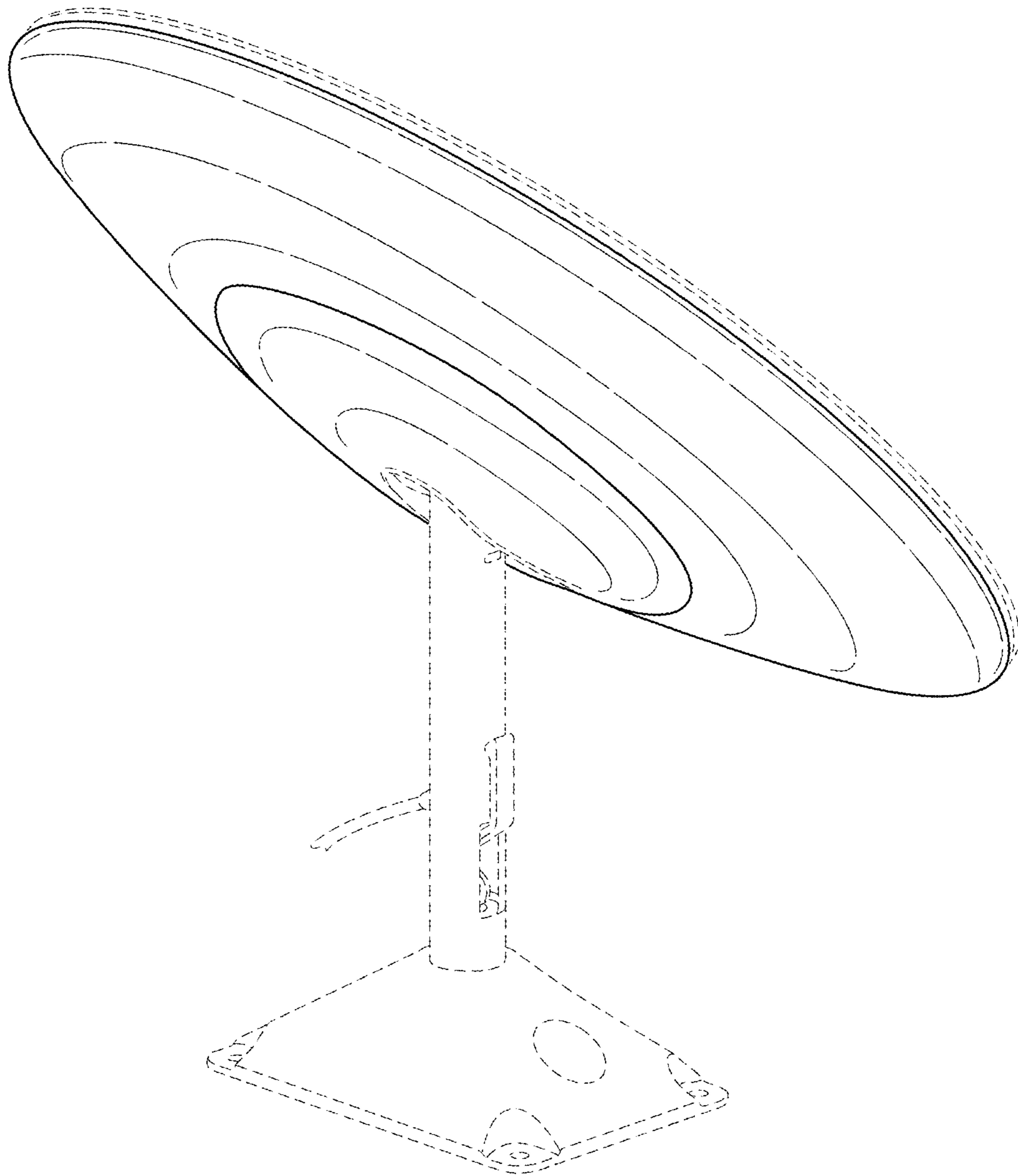


FIG. 1

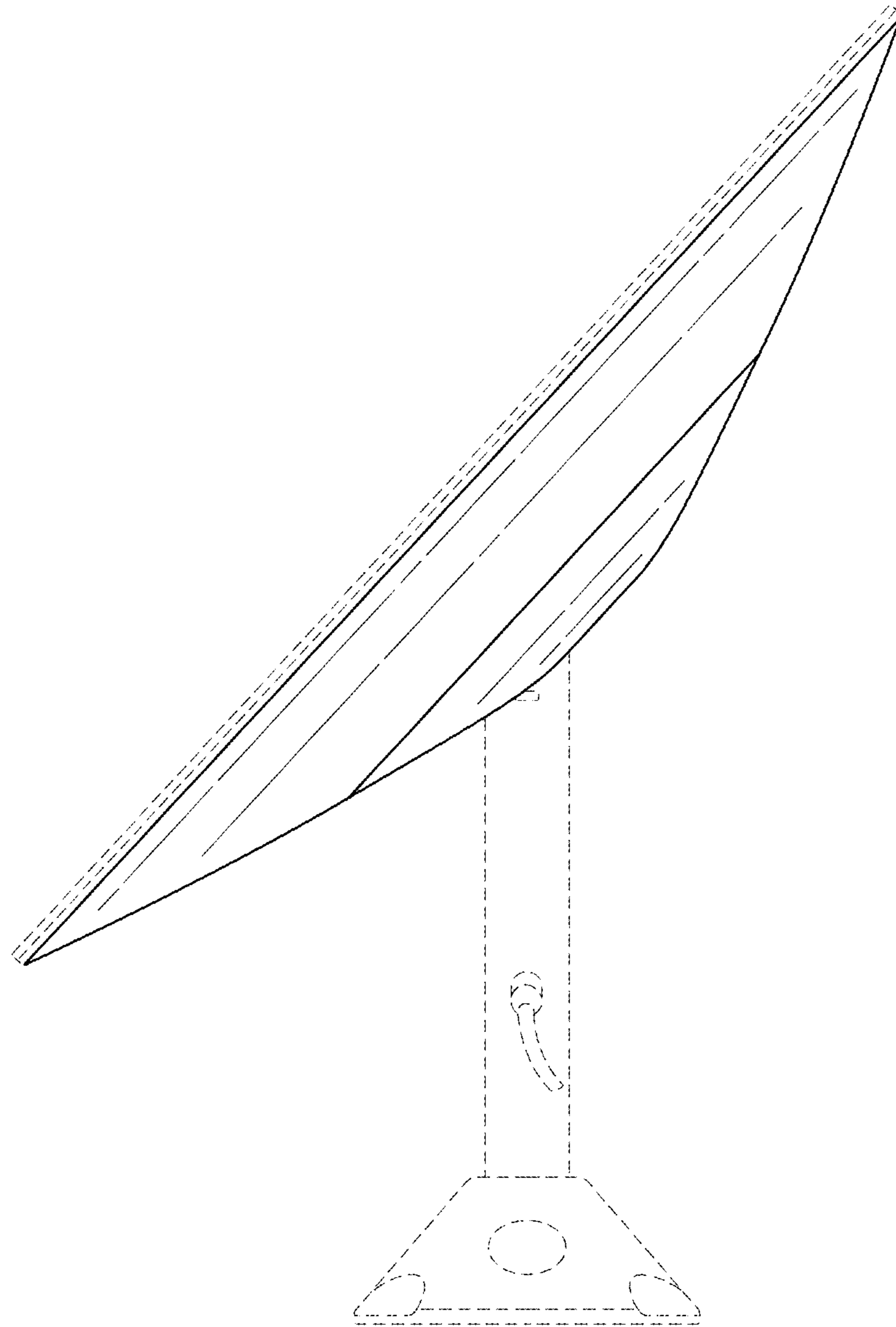


FIG. 2

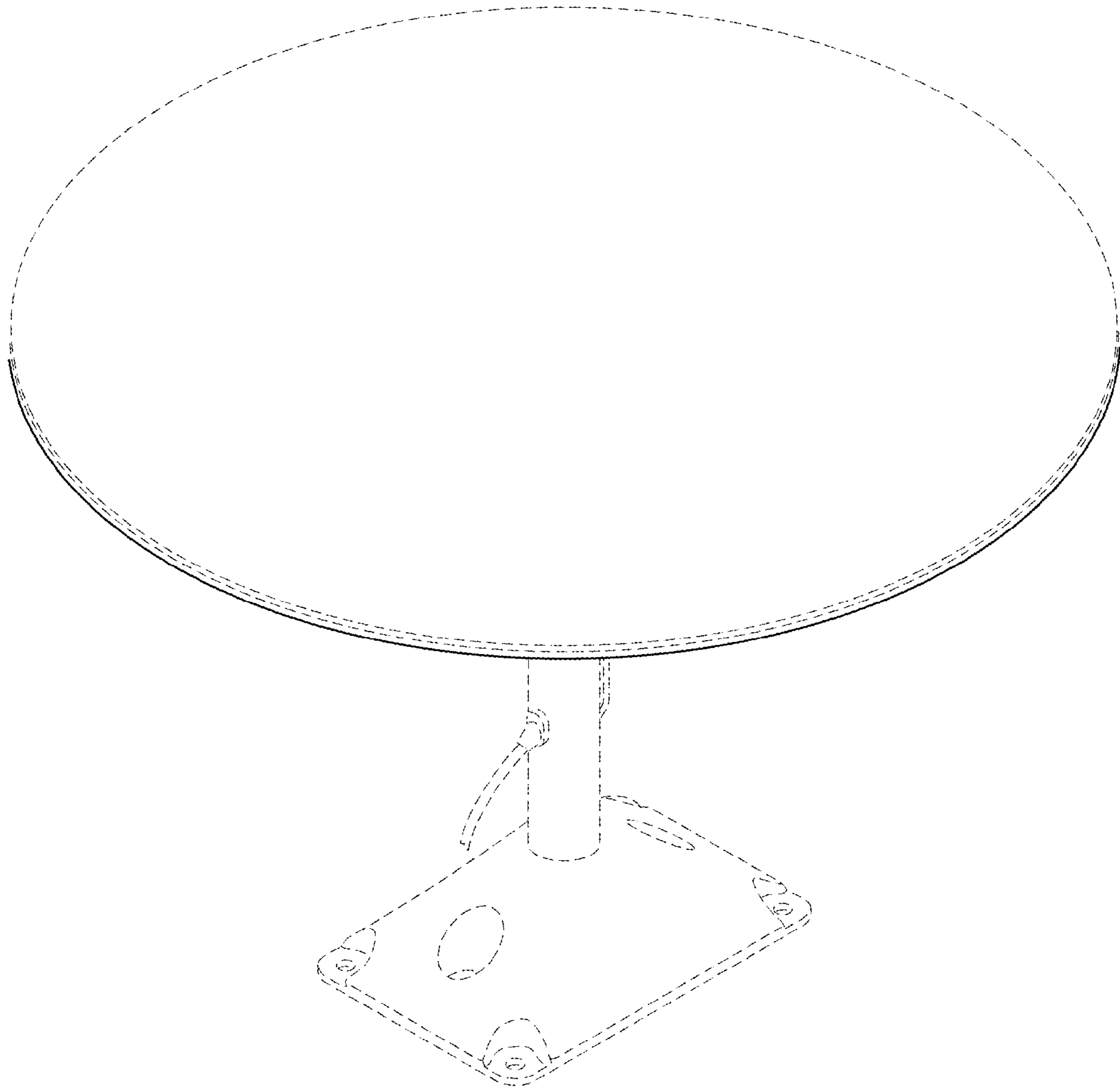


FIG. 3



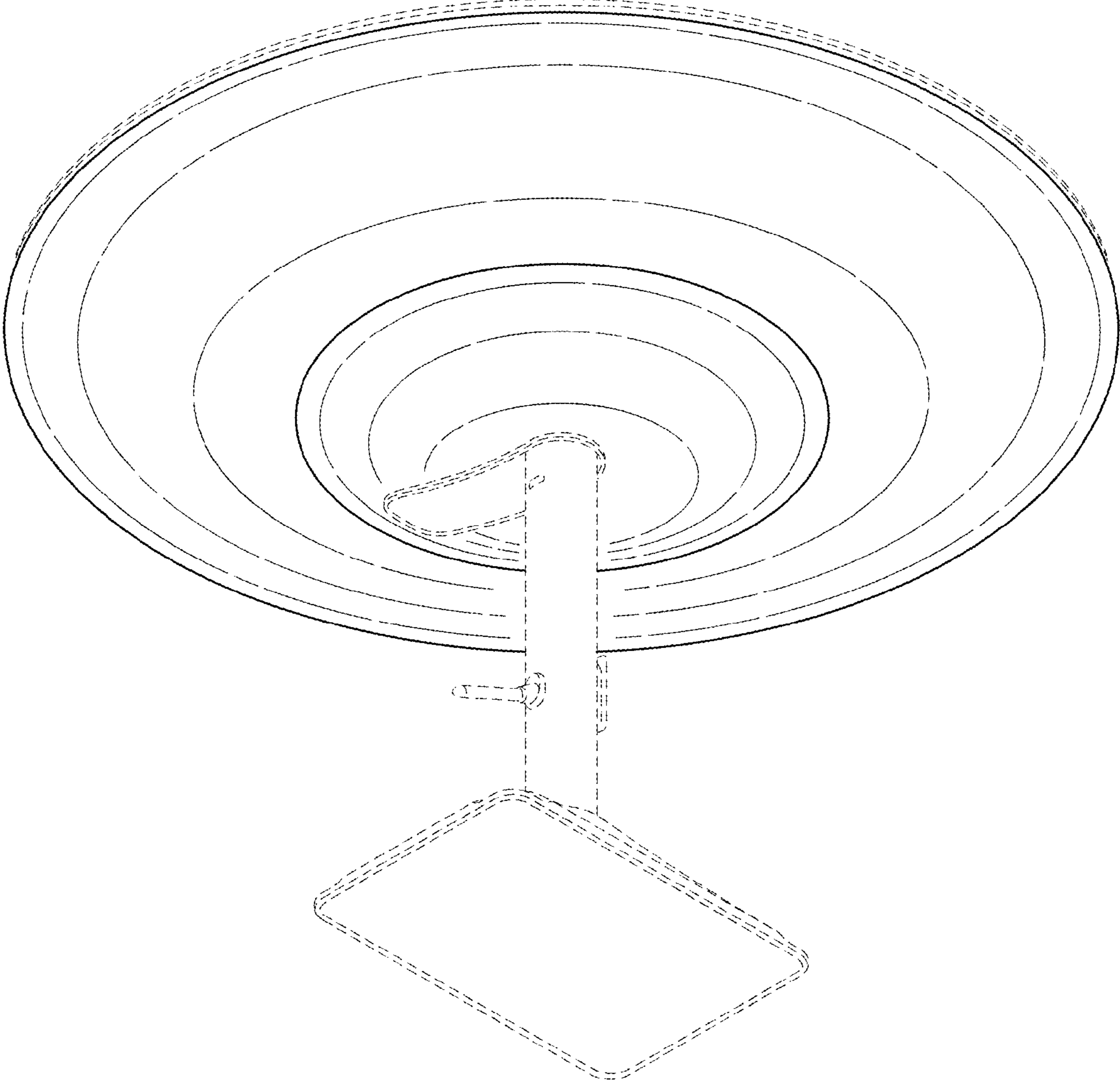


FIG. 4

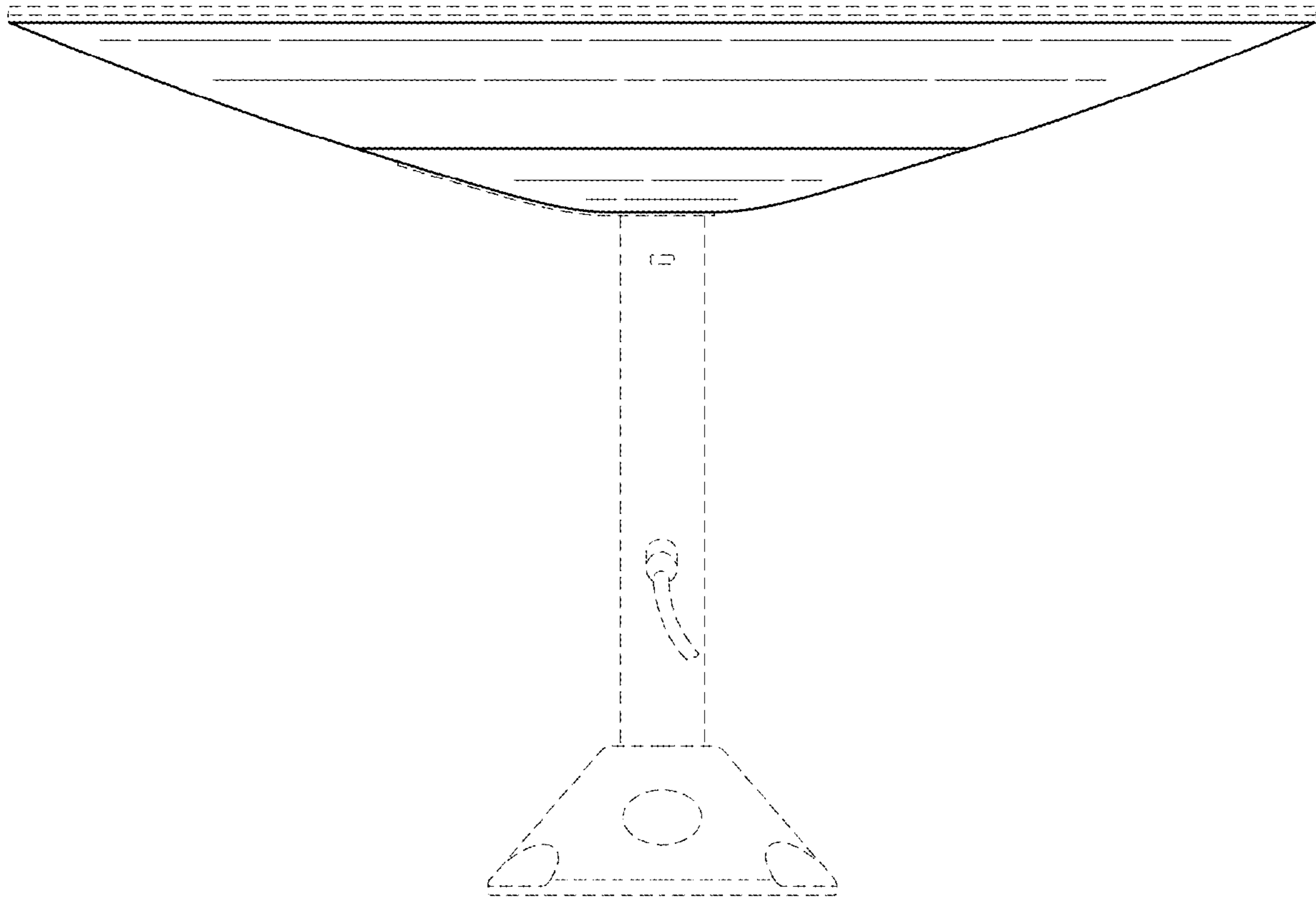


FIG. 5

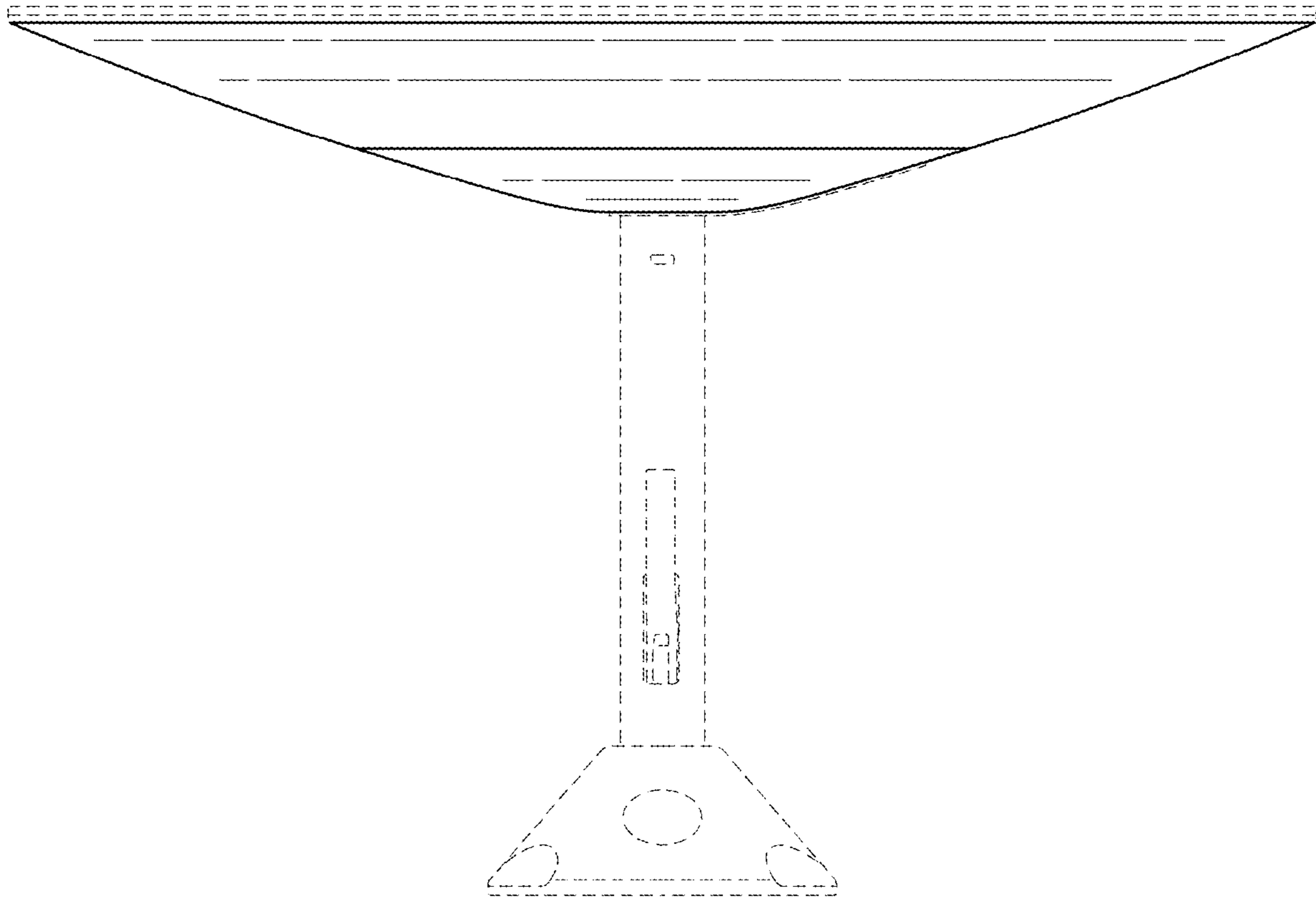
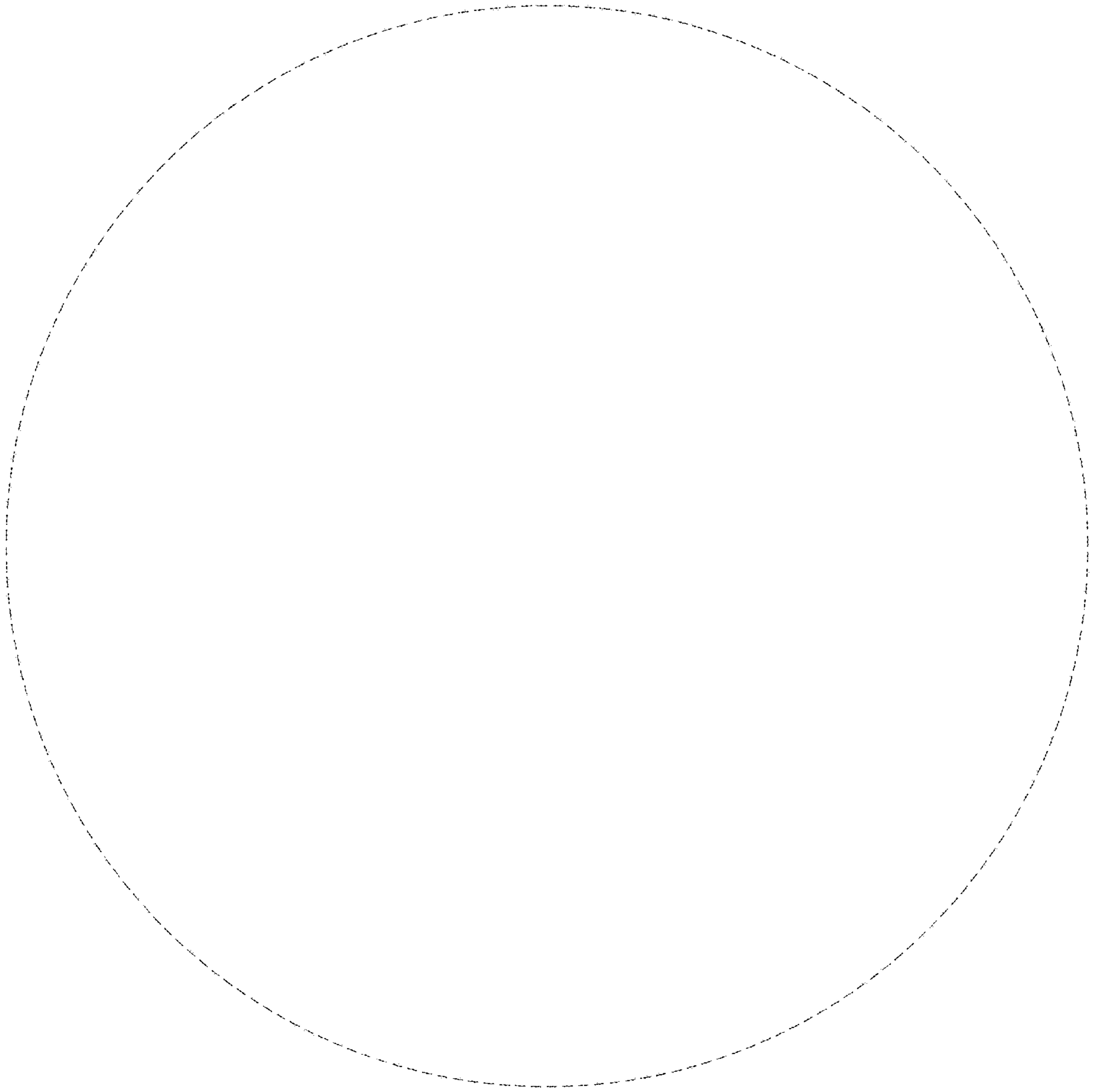


FIG. 6





**FIG. 7**

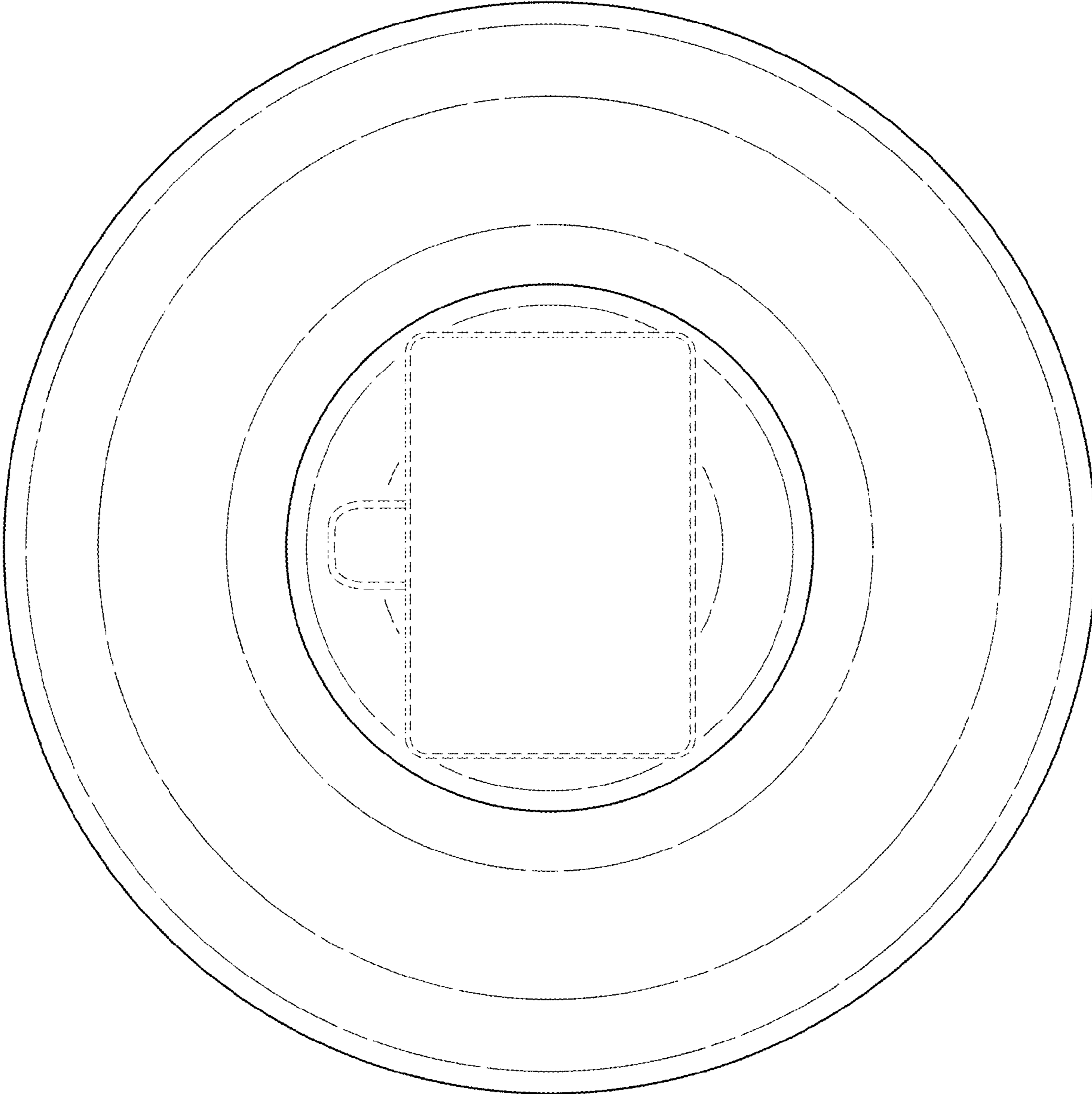


FIG. 8

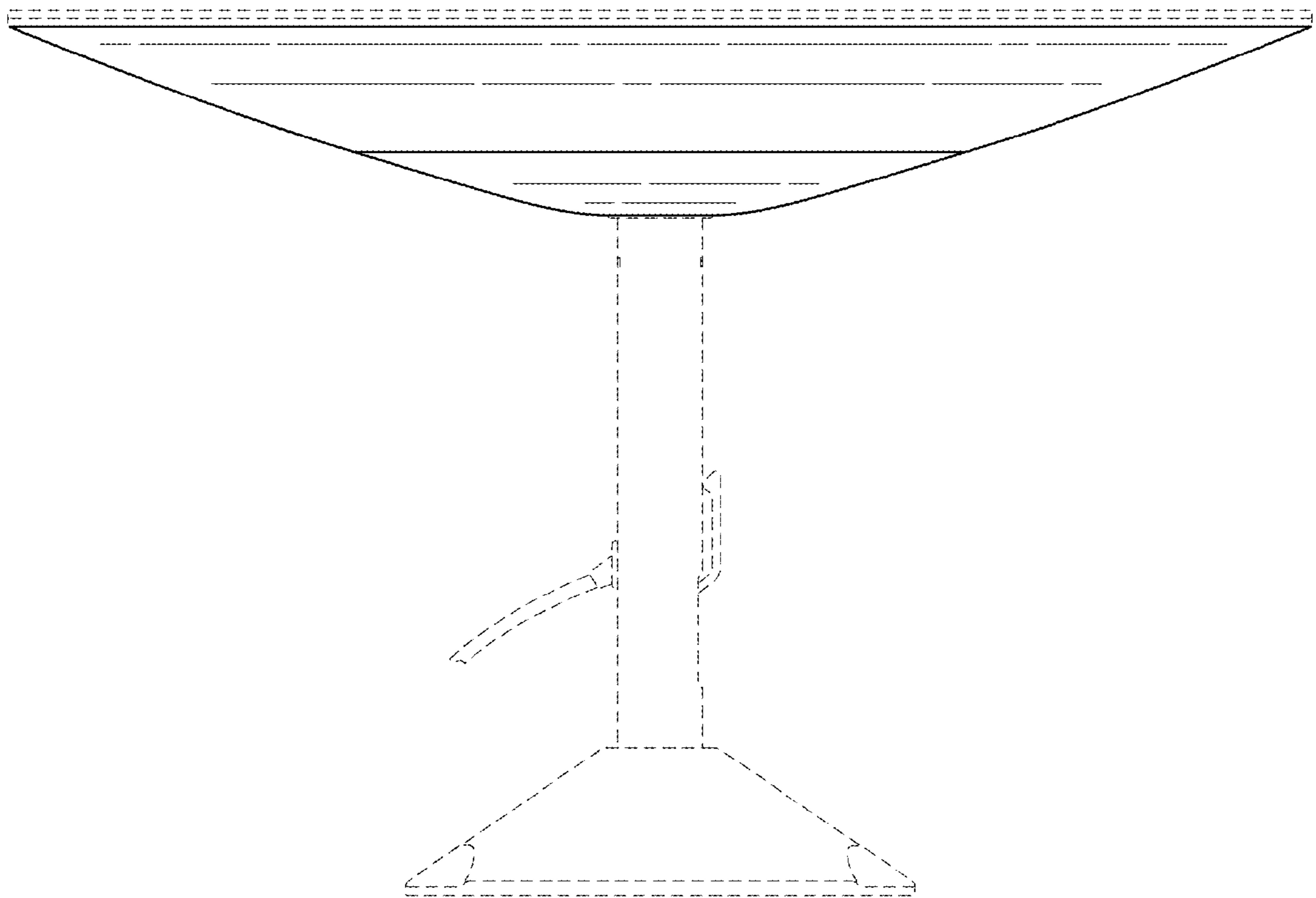


FIG. 9

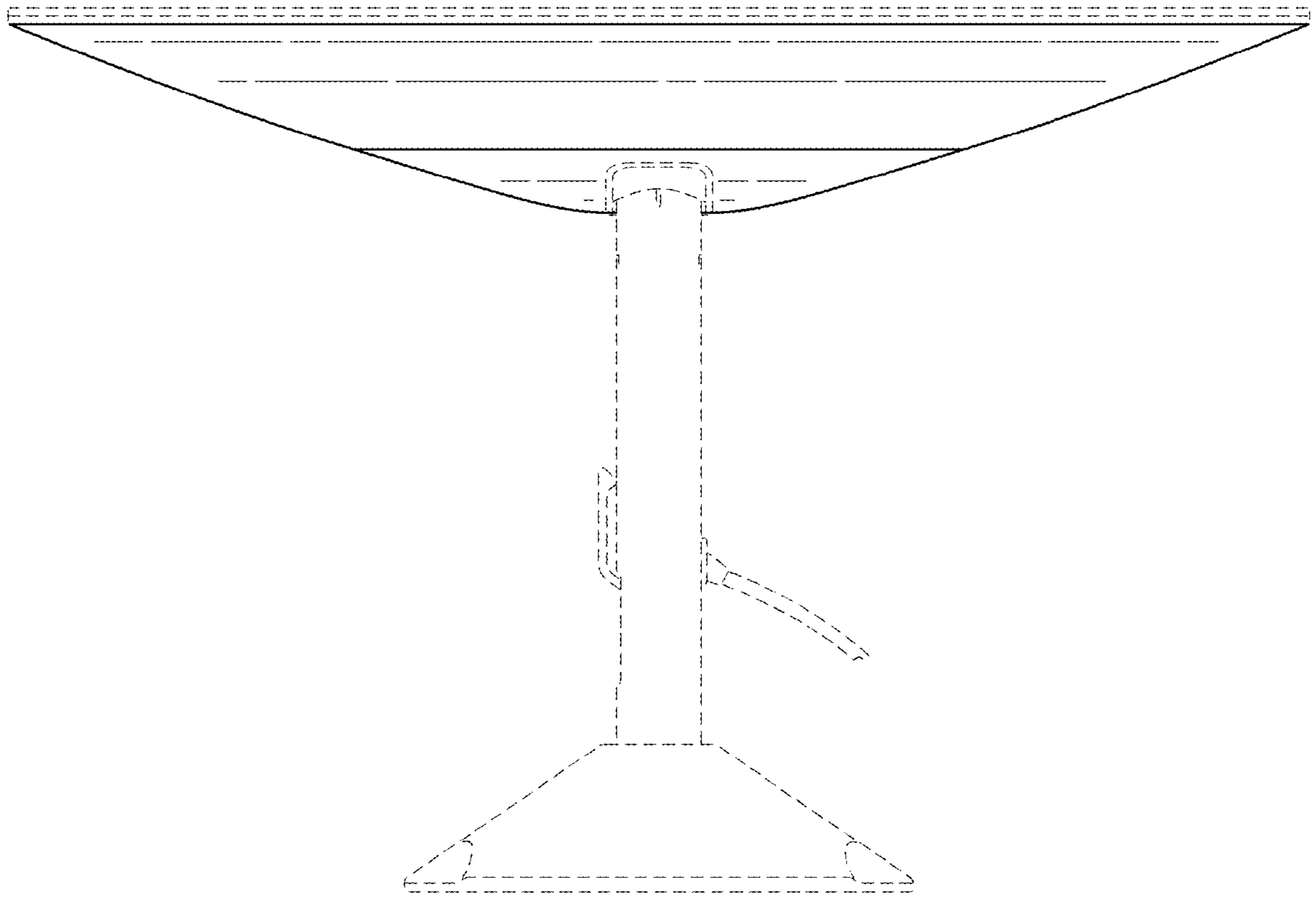


FIG. 10